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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
097241,413	02/02/99	SONG	0465-0552P-S

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EXAMINER
KOSTAK, V

ART UNIT	PAPER NUMBER
2711	

DATE MAILED:

08/18/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/241,413

Applicant(s)

Song

Examiner

Victor R. Kostak

Group Art Unit

2711



☒ Responsive to communication(s) filed on Jul 31, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 4-9 and 11-31 is/are pending in the application

Of the above, claim(s) _____ is/are withdrawn from consideration

☒ Claim(s) 17-23 and 30 is/are allowed.

☒ Claim(s) 4, 8, 9, 15, 16, 24-27, 29, and 31 is/are rejected.

☒ Claim(s) 5-7, 11-14, and 28 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on Jul 31, 2000 is ☒ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8, 9, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Because base claims 3 and 10 have been canceled, the subject matter of respective dependent claims 8 and 15 has indefinite antecedence.

2. Applicant's arguments filed 7/31/00 have been fully considered but they are not persuasive. The rejections in the previous Office action therefore apply to redrafted claims⁴₁ 24-27, 29 and 31, which are anticipated by Donovan under 35 U.S.C. 102(e).

Applicant's arguments spanning pages 17 and 18 regarding new and broad claim 31 (the first claim referred to) is irrelevant and not persuasive because the claim simply recites determining an input format and a desired output format. Donovan clearly does this since he selects among different input format parameters and different output formats as so desired (note, e.g. col. 3 lines 27-30; col. 9 lines 7-22). Like applicant's system, Donovan has plural but not infinite (i.e. limited) input and output formats to choose from.

Regarding claim 29, applicant argues that Donovan uses control of a clock signal, whereas applicant uses a horizontal converting unit ... comprising a second operation unit and a second

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control unit. The clock circuit of Donovan (and whatever additional circuitry directly associated with it) clearly functions as the second operation unit which carries out horizontal conversion, and which is clearly under some control rather than functioning arbitrarily, as by a clock controller. Applicant acknowledges Donovan's control of a clock signal (page 18), wherein the clock signal is of course generated by a clocking device.

As for claim 24, applicant argues that Donovan does not disclose a numerator generating unit and a subsequent denominator unit, based again upon control signals. Donovan clearly includes both numerator and an associated subsequent denominator circuitry, and includes control circuitry for both to, for example, derive a scaling factor of $3/4$ (text starting from col. 11 line 23), as pointed out in the last Office action.

As for claims 25 and 27, Donovan uses luminance and chrominance signals, as mentioned in the previous Office action.

Likewise regarding claim 26, its limitations were addressed in the last Office action in consideration of claim 3. Repeated from the last Office action, Fig. 14 shows a delay (line store) for the input luminance signal and continues to receive subsequent luminance data, and Donovan applies a calculated ratio defined by numerator M and denominator N (Col. 11 line 23+), which relates the input value "a" to the desired output value "b" to the conversion elements (e.g. 208, 206), which one of ordinary skill in the art can consider or designate as "operand mapping" circuitry (Donovan also describes ALU elements in Fig. 11 for carrying out the conversion process).

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Regarding claim 4 (amended essentially for syntax), Donovan describes plural arrangements (Figs. 16, 22, 23) which include plural multiplexers for carrying out the conversion process involving the initial (delayed) input luminance and subsequent luminance signals which are processed according to the input and output operand values "a" and "b". This was explained on the last Office action.

3. As was also pointed out in the last Office action, both Horii and Gray were very pertinent to original claims 1-3, but the applicant apparently did not draft the new claims with these references considered because they remain very pertinent. The examiner did not apply an additional rejection to the similar new claims (as well as previously) so as not to be exhaustive and repetitive, and because Donovan still applies anyway.

4. Claims 5, 6, 8, 9, 11-23²⁴ and 30¹⁸ appear allowable over the prior art.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor R. Kostak whose telephone number is (703) 305-4374. The examiner can normally be reached on Monday - Friday from 6:30am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew I. Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

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(703) 308-6306, (for formal communications; please mark "EXPEDITED
PROCEDURE"; for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington. VA., Sixth Floor (Receptionist).

Victor R. Kostak
Primary Examiner



VRK
August 17, 2000